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REMARKS

Claims 46-64 are pending in the application. All claims stand rejected. Claims 46-55 stand rejected under 35 U.S.C. §112, second paragraph for indefiniteness. Claims 46-64 also stand rejected under 35 U.S.C. §103 in view of various combinations of references. The Examiner's comments have been carefully considered by Applicants and Applicants respectfully submit that the case, as presently amended, is in a condition for allowance.

In this regard, Applicants submit herewith one drawing sheet containing Figure 4 in response to the drawing objection set forth in the first paragraph of the Office Action. Although the Applicants submit that one of skill in the art would have readily understood the subject matter claimed in claim 46 which is supported by the originally-filed figures and description, Applicants submit this one specific example of a halogen-free composite film comprising three multi-layered laminated films forming a stacked composite film sealingly engaging one side of a functional element as particularly claimed in claim 46. The specification has likewise been amended merely to describe what is shown in newly submitted Figure 4. Indeed, Figure 4 should aid in highlighting the patentable differences between the present invention which is a composite film resulting from at least three laminated films, and the prior art which is more analogous to a single multi-layered laminated film. The Applicants respectfully request that these amendments be entered because they are at the suggestion of the Examiner and/or because it will place the case in a condition for allowance or in a better form for appeal, if necessary.

With regard to the rejections under 35 U.S.C. §112, second paragraph, claim 46 has been amended to make it clear that the composite film resulting from stacking at least three multi-layered laminated films is indeed the halogen-free composite film referred to in the preamble of the claim. Thus, claim 46, as amended, taken in conjunction with the specification and figures, including Figure 4, would be readily understood by one of skill in the art. The Applicants respectfully request that this

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amendment likewise be entered to place the case in a condition for allowance or appeal.

With regard to the rejections under 35 U.S.C. §103, Applicants submit that a *prima facie* case of obviousness has still not been established. The obviousness rejections depend upon an incomplete understanding of the claimed invention, which misunderstanding should be clarified by Figure 4. In particular, Applicants have always maintained that the present invention relates to a film resulting from a plurality (at least three) of stacked laminated films. Each of the individual laminated films are themselves multi-layered. Thus, each laminated film is a first film, a second film, and a laminating adhesive or lacquer between the first and second films. These several laminated films, when stacked together, form the claimed composite film. It is not necessary that the functional element be present between the individual films of the several laminated films, or even between each of the several laminated films. Rather, the resulting composite film comprising stacked laminated films is what sealingly engages the printed circuit board or metallic conductor or electronic component, for example.

According to the Office Action, JP '824 admittedly does not disclose a composite film comprising at least three to N multi-layered laminate films. Indeed, the JP '824 reference does not disclose a composite film as claimed or anything like it. A review of the JP '824 reference abstract makes it clear that a metal foil 3 (a functional element) is sandwiched between two plastic films 4, 5 which is bonded into an integrated form by bonding agents 6, 7 and a complex tape 2 is manufactured. In other words, the resulting complex tape is a single multi-layered laminated film which is bonded to one side of the functional element which, in this case, is a metal foil. There is no suggestion or teaching of "at least three" multi-layered laminated films stacked together to form a composite film which is thereafter sealingly engaged to one side of a functional element. Also, the JP '824 reference would not have been modified to include multiple layers of the "complex tape" on each side of the functional element. This is because the JP '824 reference is primarily concerned with providing a

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flat cable that can be repeatedly bent without cracking. This desirable flexibility results from the single layer of complex tape on each side of the metal foil being bonded together and thereby sandwiching the metal foil in-between the plastic films. Having at least three layers of complex tape as required by the present invention would, most likely, significantly reduce the flexibility of the flat cable of the JP '824 reference.

The present invention, in contrast, is directed toward providing a halogen-free film which satisfies the requirements for high temperature resistance, low shrinkage and excellent chemical resistance, particularly hydrolytic resistance.

Applicants submit that a *prima facie* case of obviousness has not been established. Applicants maintain that the obviousness rejection cannot be maintained in light of the complete lack of teaching of even two multi-layered laminated films forming a composite film, as well as a complete absence of any suggestion or motivation to modify the JP '824 reference to include multiple multi-layered laminated films on each side of the functional element as claimed in the present invention.

As an initial matter, no combination of references teach each of the elements of independent claims 46 and 56. Rather, the Office Action relies upon the knowledge generally available to one of skill in the art, and that the specific information necessary to support the rejection is a matter of design choice. That is, the combination of references lacks specific information – multiple multi-layered laminates – and relies upon “general knowledge” in the prior art that the Office Action assumes would teach the missing subject matter. However, no specific reasoning is provided to substantiate this assertion, as is required. *In re Chu*, 36 U.S.P.Q.2d 1089, 1094 (Fed. Cir. 1995) (reversing an obviousness rejection because the Patent Office provided no specific reasoning to support the assertion of design choice). Accordingly, the knowledge generally available to one of skill in the art would not suggest having additional multi-layered laminated films to the device of the JP '824 reference because the JP '824 reference advocates flexibility (fewer layers) rather than protection for the functional element as claimed in the present invention. In a similar manner, if one of skill in the

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art was seeking to protect a functional element they would likely, as they have in the past, merely add more layers to a single multi-layered laminate. The fact that one of skill in the art has the capabilities to arrive at the invention is not the test for whether one of skill in the art would have arrived at the invention based on the teachings of the prior art. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300, 1301-02 (Bd. Pat. App. & Inter. 1993) ("That which is within the capabilities of one skilled in the art is not synonymous with obviousness"). The focus must remain on what the prior art suggested to one of skill in the art at the time the invention was made.

Critically, none of the prior art references relied upon in the Office Action disclose or suggest devising a multi-layered laminated film and applying at least three of those multi-layered laminated films stacked together to form a composite film on one side of a functional element. Thus, the Office Action presents a classic case of impermissible hindsight reconstruction, particularly in view of its reliance on the "general knowledge" of one skilled in the art. As stated by the Federal Circuit:

Because the [Examiner] did not explain the specific understanding or principle within the knowledge of a skilled artisan that would motivate one with no knowledge of [Applicant's] invention to make the combination, this court infers that the examiner selected these references with the assistance of hindsight. This Court forbids the use of hindsight in the selection of references that comprise the case of obviousness.

In re Rouffet, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998).

Furthermore, the Office Action errs in defining the problem facing the invention in terms of its solution in the selection of references. In other words, the Office Action's formulation of the problem confronting the Applicants (the need for more protection) presumes the solution to the problem (double or triple the layered film taught in JP '824). "Defining the problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to obviousness." *Monarch Knitting Machine Corp. v. Sulzer Morat GmbH*, 45 U.S.P.Q.2d 1977, 1981-82 (Fed. Cir. 1998). Also, to say that the missing step, i.e., adding more layered films, comes for the nature of the

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problem to be solved, i.e., protecting the functional element, begs the question because the Office Action fails to show that this problem is identified in the JP '824 reference. *Van Veen v. U.S.*, 156 U.S.P.Q. 403, 405 (Ct. Cl. 1967).

Thus, although the Office Action purports to recognize the need to identify a suggestion or motivation to modify the prior art, it fails to do so and, indeed, succumbs to the allure of using the claimed invention as a template for modifying the prior art. *ACS Hosp. Sys., Inc. v. Montefirre Hosp.*, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). (It is impermissible to use the patent itself as the source of suggestions).

The lack of motivation to modify the JP '824 reference is even stranger given that it teaches away from adding additional layers. Reading the JP '824 reference, one of skill in the art would be directed toward fewer layers to enhance flexibility, rather than at least three multi-layered films desired by the Applicants' invention. It is not sufficient to say that the present invention is obvious merely because it is within the capabilities of one of skill in the art particularly here, where a critical element – multiple multi-layered laminated films – is not disclosed in any prior art reference relied upon in the Office Action and the references relied upon teach away from such a feature. Such a modification of the JP '824 reference would not present itself to one of skill in the art, and obviousness cannot be established by combining pieces of prior art absent some "teaching, suggestion, or incentive supporting the combination." *In Re Geiger*, 815 F.2d 686, 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987).

The Applicants therefore submit that the present claims are allowable because the combination of art relied upon does not disclose or suggest at least three multi-layered laminated films stacked together to form a composite film sealingly engaging one side of a functional element as required by independent claims 46 and 56. Accordingly, the obviousness rejections, which all rely upon JP '824, cannot be supported and should be withdrawn.

Having overcome all of the objections and rejections set forth in the Office Action, the Applicants submit that the application is in a condition for allowance. A Notice of Allowance indicating the same is therefore earnestly solicited. The Examiner

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is invited to telephone the Applicants' undersigned attorney at (248) 223-9500 if any unresolved matters remain.

Respectfully Submitted,

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